REMARKS

According to the elected claim group, the assignments to the index *n* are modified by this amendment without prejudice of introducing the non-elected assignment through continuation/divisional practice.

As indicated in the Office Action dated 08/14/2003, various claims are generic, including claim 1. Other than non-statutory double patenting rejections, no other rejections have been asserted and Applicants understand that the additional species to the one chosen for the purpose of suggesting a search direction have been examined according to standard practice when dealing with various species.

The claim amendments introduced herein delete subject matter that is intended to be claimed in co-pending application serial number 09/947,041, filed on September 5, 2001, that is under examination by Examiner Cybille DeLacroix Muirhei. Therefore, the claim amendments introduced herein are not narrowing amendments because the deleted subject matter is intended to be claimed in the related case cited herein.

The new claims introduced hereby are supported in, for example, the related case serial number 09/928,122, filed on August 10, 2001, and also by the present application written description at, *inter alia*, p. 6, *ll.* 3-6, 19-25. This related case is under examination by Examiner Richard L. Raymond. An Election/Restriction Requirement and a subsequent office action asserting claim rejections have issued in this related case. Copies of these actions are attached hereto.

The new claims correspond to subject matter that was cited in the Office Action as supporting the double patenting rejection of the pending claims. In particular, the Office Action indicates that "asthma recited in claims 46-47 of application '122 is an allergic disorder." Applicants intend to cancel without prejudice claims 46-47 in Application US 09/928,122. Applicants respectfully submit that these actions render the non-statutory double patenting rejection moot and request the withdrawal of such rejection.

An Election/Restriction Requirement that is presently withdrawn and a subsequent Election/Restriction Requirement have issued in the case 09/947,041. Copy of the latter action is attached hereto.

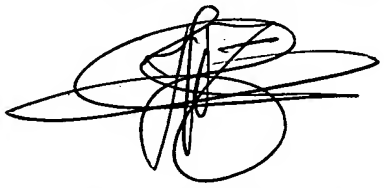
The related-application data introduced by this amendment are not the addition of new benefit claims, but simply claims that had been asserted elsewhere in the filing

materials. For example, priority claims are asserted in the oath/declaration submitted with the filing materials.

The Office Action indicates that Applicants elected without traverse "invention group II, claims 1-8, and compound of example 25". Applicants agree that the election of claims in Group II was made without traverse. As to compound 25, however, Applicants respectfully clarify that in the Response filed on September 4, 2003, it was set forth that "Applicants reserve the right to traverse any species election requirement until the time Applicants are notified of a concrete species classification for election purposes, if one were eventually asserted." Furthermore, Applicants noted in the same Response that the Examiner "directed Applicants to identify a type of compound for the purpose of suggesting a search direction". Applicants cannot meaningfully traverse a species election requirement because no species identification has been made in any Office Action other than the characterization of the alleged species as comprising "various compounds herein employed." Office Action 08/14/2003, p. 3, item 5.

Applicants respectfully request favorable consideration of the present Response to place the present application in condition for allowance.

Respectfully submitted,



By: Jesús Juanós i Timoneda, PhD
Reg. No. 43,332

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933-7003
(732) 524-1513
Dated: April 29, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:	J. Guy Breitenbucher, *et al.*	)
Serial No.	:	10/075,673	) Art Unit 1617
Filed	:	February 13, 2002.	)
Title	:	Method for treating allergies using substituted pyrazoles	)
Examiner	:	Shengjun WANG	)
Confirmation Number: 2680			)

Attachments to Amendment and Response "B"

Copies of the following Office Actions are part of this Attachment:

Office Action US 09/947,041 dated 11/05/2003 (4 sheets)

Office Action US 09/928,122 dated 12/11/2003 (18 sheets)

Office Action US 09/928,122 dated 10/23/2002 (6 sheets)

JJT DKT

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/947,041	09/05/2001	J. Guy Breitenbucher	ORT-1494	5689

27777 7590 11/05/2003

PHILIP S. JOHNSON
JOHNSON & JOHNSON
ONE JOHNSON & JOHNSON PLAZA
NEW BRUNSWICK, NJ 08933-7003

EXAMINER	
REAMER, JAMES H	

ART UNIT	PAPER NUMBER
1614	

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Restriction Requirement due 12/05/03

Office Action Summary	Application No. 09/947,041	Applicant(s) BREITENBUCHER ET AL.	
	Examiner James H. Reamer	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2003* .

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-8* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention: The species of examples 1 to 45.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over

the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Reamer whose telephone number is (703) 308-4461. The examiner can normally be reached on 5:30 AM to 2:00 PM Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

James H. Reamer
Primary Examiner
Art Unit 1614

JHR
05 November 2003

JJT DKT

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,122	08/10/2001	J. Guy Breitenbucher	ORT-1478	6262

27777 7590 12/11/2003

PHILIP S. JOHNSON
JOHNSON & JOHNSON
ONE JOHNSON & JOHNSON PLAZA
NEW BRUNSWICK, NJ 08933-7003

EXAMINER	
RAYMOND, RICHARD L	
ART UNIT	**PAPER NUMBER**
1624	

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Response due: 03/11/04

Office Action Summary	Application N .	Applicant(s)	
	09/928,122	BREITENBUCHER ET AL.	
	Examin r	Art Unit	
	Richard L. Raymond	1624	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8* is/are allowed.

6)☒ Claim(s) *1-7 and 9-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2-4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicants have elected the invention of Group I and the species of example 25. Claim 8, limited to the nonelected elected subject matter of Group II (compounds where R^5 and R^6 do not form a fused ring), stands withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

Improper Markush Rejection

2. Claims 1-7 and 9-50 are rejected as being improper Markush claims in the definition of the XYZ, R^5, R^6 and n variables as set forth in the five groups of the restriction requirement. The resulting total compounds lack a significant common core and are structurally diverse and patentable distinct one from the others. A reference anticipating one under 35 USC 102 would not be a reference against the others under 35 USC 103. Further, diverse fields of search in the US classification system and the literature (STN/CAS) are involved. Limitation of the claims to compounds where XYZ is monocyclic or fuses with W/ R^1, R^5 and R^6 together form pyridine or carbocyclic rings and n is 1, encompassing the elected species, will overcome this rejection.

3. The claims have been searched and examined to the extent that they read on the above grouped invention.

Claim Rejections - 35 USC § 102 / 35 USC § 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7 and 9-50 are rejected under 35 U.S.C. 102(a and b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over any of the three Database X references or the British patent X reference cited on applicants' corresponding PCT Search Report or any of the five Chemical Abstracts articles cited on the Form PTO-892. These references all disclose compounds within the present claims. Where not anticipated, one would be motivated to prepare the present compounds from within the generic teachings of the references and/or to prepare the present simple alkyl homologs, halo analogs and position isomers of the specific compounds of the references with the reasonable expectation of obtaining additional useful pharmaceuticals. In the absence of a showing of unexpected properties, no patentable significance is seen in the present selection.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Miscellaneous

8. It is requested that a copy of the IDS filed October 1, 2002 (Paper #5) be supplied to complete the record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Raymond whose telephone number is (703) 308-4523. The examiner can normally be reached on Monday-Thursday (9:30AM-8:00PM)).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mukund J. Shah can be reached on 305-4716. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Richard L. Raymond
Primary Examiner
Art Unit 1624

rr
December 10, 2003

Notice of References Cited

Application/Control No.	Applicant(s)/Patent Under Reexamination	
09/928,122	BREITENBUCHER ET AL.	
Examiner	Art Unit	Page 1 of 2
Richard L. Raymond	1624	

U.S. PATENT DOCUMENTS

		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Paluchowska et al., Chemical Abstracts, Vol. 134:36671, 2000.
	V	Paluchowska et al., Chemical Abstracts, Vol. 132:245821, 1999.
	W	Lavielle et al., Chemical Abstracts, Vol. 130:237561, 1999.
	X	Andronati et al., Chemical Abstracts, Vol. 130:276243, 1999.

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited

Application/Control No.	Applicant(s)/Patent Under Reexamination	
09/928,122	BREITENBUCHER ET AL.	
Examiner	Art Unit	Page 2 of 2
Richard L. Raymond	1624	

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

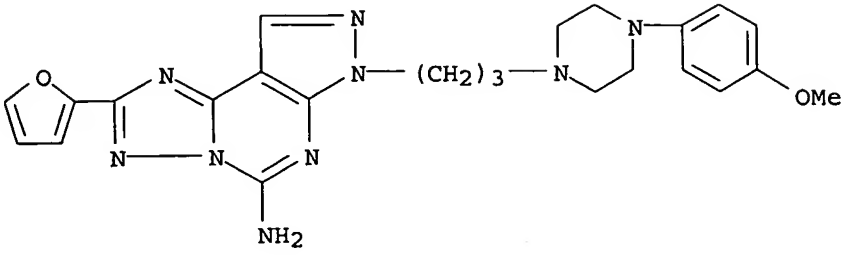
NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Fukuda et al., Chemical Abstracts, Vol. 123:83356, 1995.
g	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Applicant's copy

INDEX NAME)



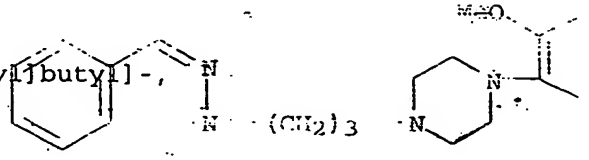
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

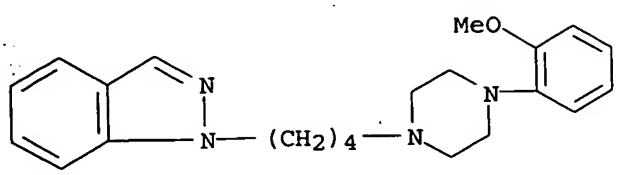
L10 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:575148 CAPLUS
DOCUMENT NUMBER: 134:36671
TITLE: Influence of the aliphatic spacer length on the 5-HT1A receptor activity of new arylpiperazines with an indazole system
AUTHOR(S): Paluchowska, Maria H.; Duszynska, Beata; Klodzinska, Aleksandra; Tatarczynska, Ewa
CORPORATE SOURCE: Department of Medicinal Chemistry, Polish Academy of Sciences, Krakow, PL 31-343, Pol.
SOURCE: Polish Journal of Pharmacology (2000), 52(3), 209-216
CODEN: PJPAE3; ISSN: 1230-6002
PUBLISHER: Polish Academy of Sciences, Institute of Pharmacology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Novel arylpiperazines, contg. a terminal 1- or 2-indazolyl fragment and a di- or tetramethylene aliph. spacer, were synthesized and their 5-HT1A and 5-HT2A receptor affinities were detd. All those compds. showed a potent affinity for 5-HT1A receptors (Ki = 5-16 nM) and were evaluated for an intrinsic activity at those receptors. To det. a 5-HT1A agonistic effect of the investigated compds., their ability to induce a lower lip retraction in rats and a behavioral syndrome (flat body posture and forepaw treading) in reserpinized rats were tested, whereas their 5-HT1A antagonistic activity was assessed via inhibition of those symptoms produced by 8-hydroxy-2-(di-n-propylamino)tetralin hydrobromide (8-OH-DPAT). The effect of spacer length on the 5-HT1A activity of the tested compds. was discussed in comparison with that of the 3-methylene analogs described earlier. Both dimethylene derivs. were characterized as weak postsynaptic 5-HT1A receptor antagonists. Compds. 1-indazolyl analog and 2-indazolyl analog, with a tetramethylene aliph. chain were classified as a postsynaptic 5-HT1A antagonist and a partial 5-HT1A agonist, resp. Furthermore, the latter showed a moderate anxiolytic-like effect (conflict drinking Vogel's test in rats) and a weak antidepressant-like activity (forced swimming Porsolt's test in rats).

IT 313053-44-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(arylpiperazines, new 5-HT1A receptor ligands)

RN 313053-44-0 CAPLUS
CN 1H-Indazole, 1-[4-[4-(2-methoxyphenyl)-1-piperazinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)





●2 HCl

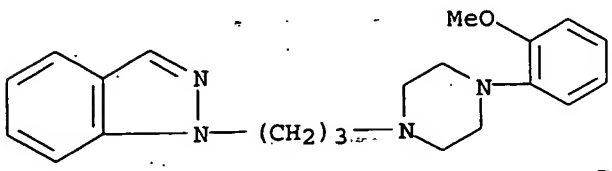
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:807683 CAPLUS
DOCUMENT NUMBER: 132:245821
TITLE: Structure-activity relationship studies of CNS agents. 40. Effect of the amide fragment on 5-HT1A receptor activity of some analogs of MP 3022
AUTHOR(S): Paluchowska, Maria H.; Charakchieva-Minol, Sijka; Tatarczynska, Ewa; Klodzinska, Aleksandra
CORPORATE SOURCE: Department of Medicinal Chemistry, Polish Academy of Sciences, Krakow, PL 31-343, Pol.
SOURCE: Polish Journal of Pharmacology (1999), 51(5), 415-421
CODEN: PJPAE3; ISSN: 1230-6002
PUBLISHER: Polish Academy of Sciences, Institute of Pharmacology
DOCUMENT TYPE: Journal
LANGUAGE: English

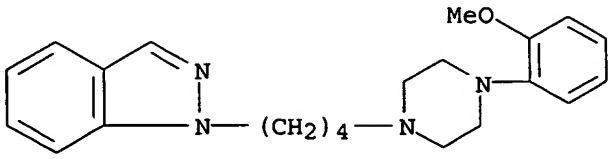
AB A new set of analogs of MP 3022 (1) contg. the amide bond inserted into the intermediate chain linking the terminal heteroarom. and 1-(2-methoxyphenyl)piperazine moieties were prepd. and their 5-HT1A and 5-HT2A receptor affinities were detd. Only compds. with trimethylene chain between amide and arylpiperazine fragments showed satisfactory affinity for 5-HT1A receptor (Ki = 42-87 nM) and high 5-HT2A/5-HT1A selectivity. The new 5-HT1A receptor ligands were investigated in vivo to det. their 5-HT1A agonistic or antagonistic properties. Compds. with terminal indazole fragment or with Ph substituent behaved like weak 5-HT1A receptor antagonists. The structure-affinity relationship studies in this series of compds. revealed that the amide group along with the terminal arom. fragments contributed to interaction with 5-HT1A receptor sites, whereas in vivo results indicated that introduction of the amide group into presented arylpiperazine structures was not a profitable modification for their 5-HT1A functional activity.

IT **184535-35-1**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(5-HT1A receptor affinity of MP 3022 analogs)

RN 184535-35-1 CAPLUS
CN 1H-Indazole, 1-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propyl]- (9CI) (CA INDEX NAME)



Applicants copy



●2 HCl

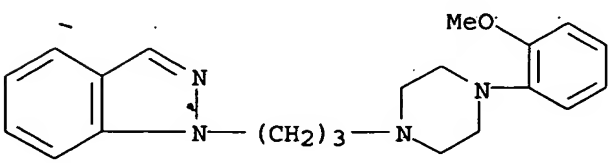
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

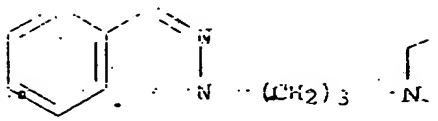
L10 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:807683 CAPLUS
DOCUMENT NUMBER: 132:245821
TITLE: Structure-activity relationship studies of CNS agents. 40. Effect of the amide fragment on 5-HT1A receptor activity of some analogs of MP 3022
AUTHOR(S): Paluchowska, Maria H.; Charakchieva-Minol, Sijka; Tatarczynska, Ewa; Klodzinska, Aleksandra
CORPORATE SOURCE: Department of Medicinal Chemistry, Polish Academy of Sciences, Krakow, PL 31-343, Pol.
SOURCE: Polish Journal of Pharmacology (1999), 51(5), 415-421
CODEN: PJPAE3; ISSN: 1230-6002
PUBLISHER: Polish Academy of Sciences, Institute of Pharmacology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new set of analogs of MP 3022 (1) contg. the amide bond inserted into the intermediate chain linking the terminal heteroarom. and 1-(2-methoxyphenyl)piperazine moieties were prepd. and their 5-HT1A and 5-HT2A receptor affinities were detd. Only compds. with trimethylene chain between amide and arylpiperazine fragments showed satisfactory affinity for 5-HT1A receptor (Ki = 42-87 nM) and high 5-HT2A/5-HT1A selectivity. The new 5-HT1A receptor ligands were investigated in vivo to det. their 5-HT1A agonistic or antagonistic properties. Compds. with terminal indazole fragment or with Ph substituent behaved like weak 5-HT1A receptor antagonists. The structure-affinity relationship studies in this series of compds. revealed that the amide group along with the terminal arom. fragments contributed to interaction with 5-HT1A receptor sites, whereas in vivo results indicated that introduction of the amide group into presented arylpiperazine structures was not a profitable modification for their 5-HT1A functional activity.

IT **184535-35-1**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(5-HT1A receptor affinity of MP 3022 analogs)

RN 184535-35-1 CAPLUS
CN 1H-Indazole, 1-[3-[4-(2-methoxyphenyl)-1-piperazinyl]propyl]-, monohydrochloride (CA INDEX NAME)





Applicant's

09/288,556

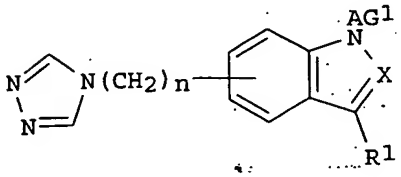
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:193935 CAPLUS
DOCUMENT NUMBER: 130:237561
TITLE: Indole and indazole derivatives, process for their preparation and the pharmaceutical compositions containing them
INVENTOR(S): Lavielle, Gilbert; Muller, Olivier; Vayssettes-Courchay, Christine; Descombes, Jean-Jacques; Verbeuren, Tony
PATENT ASSIGNEE(S): Adir et Compagnie, Fr.
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 902027	A1	19990317	EP 1998-402154	19980901
EP 902027	B1	20010725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2767827	A1	19990305	FR 1997-10939	19970903
BR 9803318	A	20000208	BR 1998-3318	19980901
AT 203531	E	20010815	AT 1998-402154	19980901
ES 2162404	T3	20011216	ES 1998-402154	19980901
NO 9804033	A	19990304	NO 1998-4033	19980902
CN 1218052	A	19990602	CN 1998-124581	19980902
CN 1087741	B	20020717		
NZ 331683	A	20000128	NZ 1998-331683	19980902
US 6020336	A	20000201	US 1998-146009	19980902
CA 2246485	AA	19990303	CA 1998-2246485	19980903
ZA 9808072	A	19990309	ZA 1998-8072	19980903
AU 9883068	A1	19990318	AU 1998-83068	19980903
AU 736602	B2	20010802		
JP 11130773	A2	19990518	JP 1998-249314	19980903
US 6046205	A	20000404	US 1999-299314	19990426
HK 1019738	A1	20021101	HK 1999-104871	19991028

PRIORITY APPLN. INFO.: FR 1997-10939 A 19970903
US 1998-146009 A3 19980902

OTHER SOURCE(S): MARPAT 130:237561
GI



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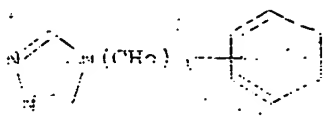


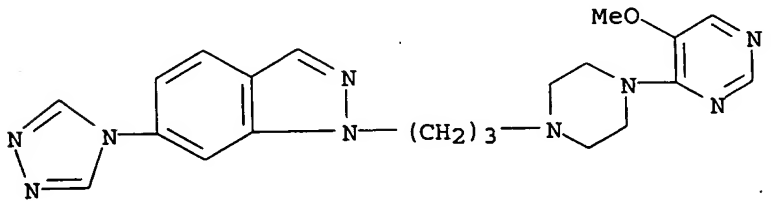
AB The title compds. I [n = 0, 1; A = bond, alkylene, alkenylene; X = N, CR2 where R2 = H, alkyl; R1 = H, alkyl; G1 = pyrrolidinyl, piperidyl optionally substituted] were prepd. E.g., 1-{3-[4-(5-methoxypyrimidin-1-

yl)piperazin-1-yl]propyl}-6-([1,2,4]triazol-4-yl)indole dihydrochloride was prepd. Effect of I on contraction of saphenous vein of dogs or rabbits was detd.

IT **221249-30-5P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indole and indazole derivs. and their effect on saphenous vein contraction)

RN 221249-30-5 CAPLUS

CN 1H-Indazole, 1-[3-[4-(5-methoxy-4-pyrimidinyl)-1-piperazinyl]propyl]-6-(4H-1,2,4-triazol-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:148062 CAPLUS

DOCUMENT NUMBER: 130:276243

TITLE: Synthesis of 3-aryl-1-[(4-phenyl-1-piperazinyl)butyl]indazole derivatives and their affinity to 5-HT1a serotonin and dopamine D1 receptors

AUTHOR(S): Andronati, S.; Sava, Vassil; Makan, S.; Kolodeev, G.

CORPORATE SOURCE: Bogatsky Physico-Chemical Institute, Nat. Acad. Sci. Ukraine, Odessa, 270086, Ukraine

SOURCE: Pharmazie (1999), 54(2), 99-101
CODEN: PHARAT; ISSN: 0031-7144

PUBLISHER: Govi-Verlag Pharmazeutischer Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Eight 3-arylindazole derivs. were synthesized and their affinity to 5-HT1A serotonin and D1 dopamine receptors was investigated by radioligand anal. Quant. structure-activity relationships were studied using the Free-Wilson model. An increase in affinity to dopamine D1 receptors within substituents Br>Cl>CH3 at the 5-position of the 3-arylindazole mol. was obsd. Addn. of a Cl2 atom to the ortho-position the of Ph ring let to even higher activity. Replacement of the H2 atom at the 1st position of the 3-arylindazole on the (phenylpiperazine)butyl substituent caused an increase of affinity and did not change the trends of affinity dependence on structure. An inverse dependence on the structure of the studied compds. was obsd. for the serotonin 5-HT1A receptors. Compds. contg. a Me group at the 5-position of mol. were more active than compds. contg. halogens. A Cl2 atom at the ortho-position of the Ph ring decreased affinity. Replacement of the H2 atom at the 1st position of the mol. on the (phenylpiperazine)butyl substituent led to an increase in affinity. Selectivity of the studied compds. varied within a wide range. Generally, the presence of the 3-arylindazole fragment in the new buspirone analogs increased their affinity to dopamine receptors and reduced their affinity to serotonin receptors. Compds. contg. a Br2 atom in the 3-arylindazole moiety may be promising ligands for D1 receptors.

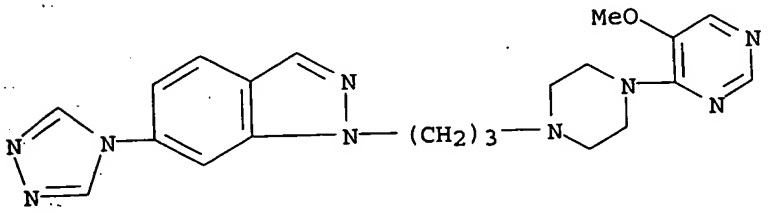
IT **163434-05-7P 163434-06-8P 163434-07-9P 163434-08-0P**

Applicants -pp

yl)piperazin-1-yl]propyl}-6-([1,2,4]triazol-4-yl)indole dihydrochloride was prepd. Effect of I on contraction of saphenous vein of dogs or rabbits was detd.

IT 221249-30-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indole and indazole derivs. and their effect on saphenous vein contraction)

RN 221249-30-5 CAPLUS
CN 1H-Indazole, 1-[3-[4-(5-methoxy-4-pyrimidinyl)-1-piperazinyl]propyl]-6-(4H-1,2,4-triazol-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

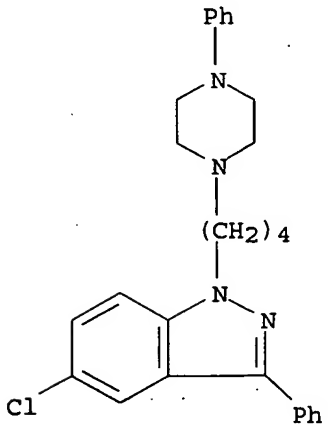
L10 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:148062 CAPLUS
DOCUMENT NUMBER: 130:276243
TITLE: Synthesis of 3-aryl-1-[(4-phenyl-1-piperazinyl)butyl]indazole derivatives and their affinity to 5-HT1a serotonin and dopamine D1 receptors
AUTHOR(S): Andronati, S.; Sava, Vassil; Makan, S.; Kolodeev, G.
CORPORATE SOURCE: Bogatsky Physico-Chemical Institute, Nat. Acad. Sci. Ukraine, Odessa, 270086, Ukraine
SOURCE: Pharmazie (1999), 54(2), 99-101
CODEN: PHARAT; ISSN: 0031-7144
PUBLISHER: Govi-Verlag Pharmazeutischer Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Eight 3-arylindazole derivs. were synthesized and their affinity to 5-HT1A serotonin and D1 dopamine receptors was investigated by radioligand anal. Quant. structure-activity relationships were studied using the Free-Wilson model. An increase in affinity to dopamine D1 receptors within substituents Br>Cl>CH3 at the 5-position of the 3-arylindazole mol. was obsd. Addn. of a Cl2 atom to the ortho-position the of Ph ring let to even higher activity. Replacement of the H2 atom at the 1st position of the 3-arylindazole on the (phenylpiperazine)butyl substituent caused an increase of affinity and did not change the trends of affinity dependence on structure. An inverse dependence on the structure of the studied compds. was obsd. for the serotonin 5-HT1A receptors. Compds. contg. a Me group at the 5-position of mol. were more active than compds. contg. halogens. A Cl2 atom at the ortho-position of the Ph ring decreased affinity. Replacement of the H2 atom at the 1st position of the mol. on the (phenylpiperazine)butyl substituent led to an increase in affinity. Selectivity of the studied compds. varied within a wide range. Generally, the presence of the 3-arylindazole fragment in the new buspirone analogs increased their affinity to dopamine receptors and reduced their affinity to serotonin receptors. Compds. contg. a Br2 atom in the 3-arylindazole moiety may be promising ligands for D1 receptors.

IT 163434-05-7P 163434-06-8P 163434-07-9P
163434-08-0P

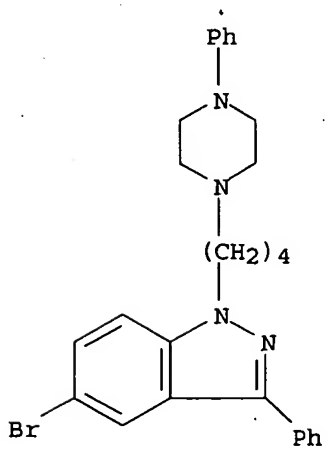
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis of 3-arylindazole derivs. and their affinity to 5-HT1a serotonin and dopamine D1 receptors)

RN 163434-05-7 CAPLUS
CN 1H-Indazole, 5-chloro-3-phenyl-1-[4-(4-phenyl-1-piperazinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)



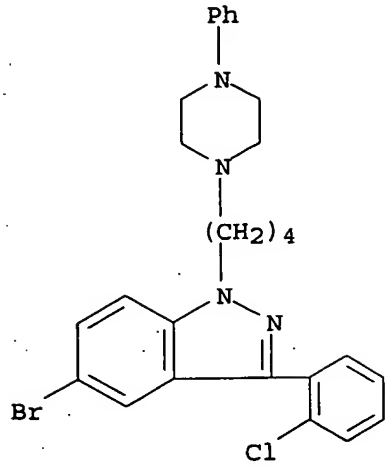
● HCl

RN 163434-06-8 CAPLUS
CN 1H-Indazole, 5-bromo-3-phenyl-1-[4-(4-phenyl-1-piperazinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)



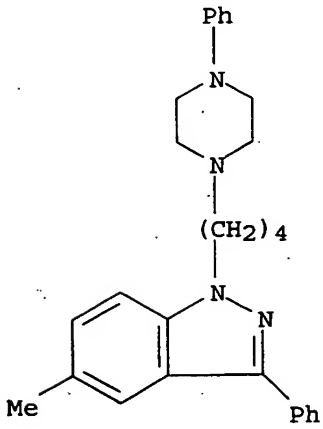
HCl

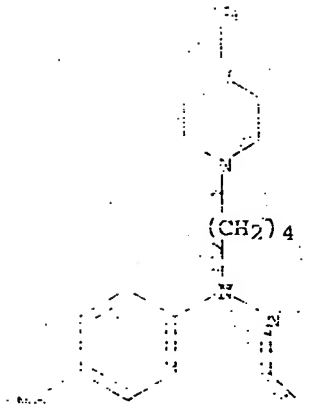
RN 163434-07-9 CAPLUS
CN 1H-Indazole, 5-bromo-3-(2-chlorophenyl)-1-[4-(4-phenyl-1-piperazinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 163434-08-0 CAPLUS
CN 1H-Indazole, 5-methyl-3-phenyl-1-[4-(4-phenyl-1-piperazinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)





● HCl

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:701302 CAPLUS
DOCUMENT NUMBER: 126:47180
TITLE: Structure-activity relationship studies of CNS agents. Part 31. Analogs of MP 3022 with a different number of nitrogen atoms in the heteroaromatic fragment. New 5-HT1A receptor ligands
AUTHOR(S): Paluchowska, Maria H.; Deren-Wesolek, Anna; Mokrosz, Jerzy L.; Charakchieva-Minol, Sijka; Chojnacka-Wojcik, Ewa

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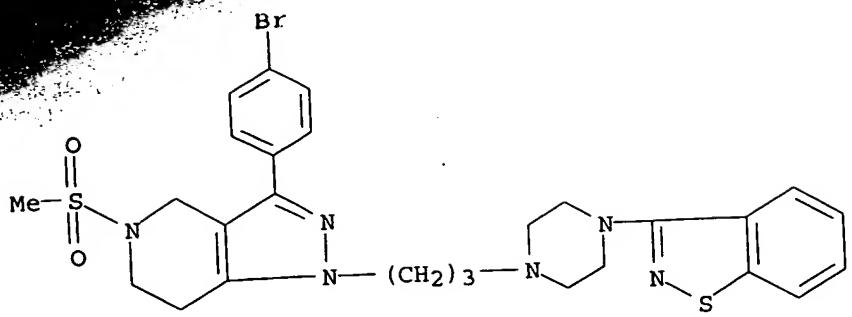
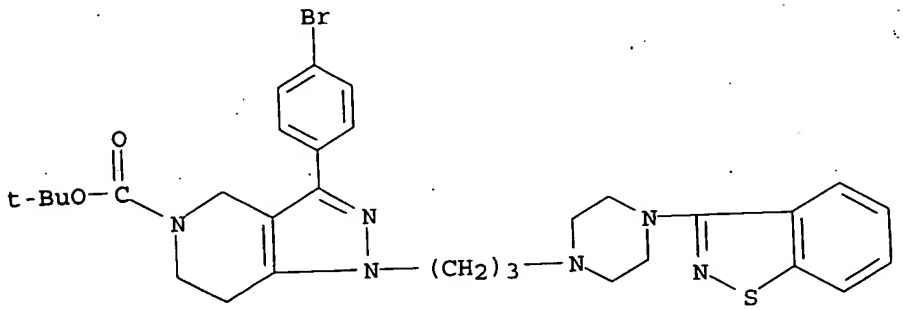
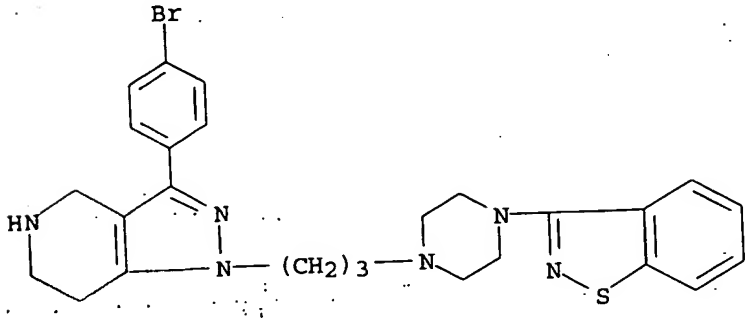


RN 400804-91-3 CAPLUS
CN 5H-Pyrazolo[4,3-c]pyridine-5-carboxylic acid, 1-[3-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]propyl]-3-(4-bromophenyl)-1,4,6,7-tetrahydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 400804-92-4 CAPLUS
CN 1H-Pyrazolo[4,3-c]pyridine, 1-[3-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]propyl]-3-(4-bromophenyl)-4,5,6,7-tetrahydro- (9CI) (CA INDEX NAME)



L12 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:682542 CAPLUS
DOCUMENT NUMBER: 123:83356
TITLE: Preparation of 3-(1-piperazinyl)-1,2-benzisothiazole derivatives with antipsychotic effect
INVENTOR(S): Fukuda, Yoshimasa; Sasaki, Toshiro; Nakatani, Yuuko; Ichimaru, Yasuyuki; Imanishi, Taiichiro

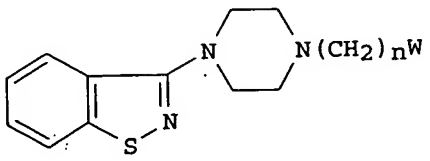
PATENT ASSIGNEE(S): Meiji Seika K. K., Japan
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9418197	A1	19940818	WO 1994-JP159	19940203
W: CN, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 635506	A1	19950125	EP 1994-905841	19940203
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
CN 1103534	A	19950607	CN 1994-190042	19940203
CN 1050604	B	20000322		
US 5599815	A	19970204	US 1994-318857	19941220

PRIORITY APPLN. INFO.: JP 1993-17505 A 19930204
WO 1994-JP1 A 19940104
WO 1994-JP159 W 19940203

OTHER SOURCE(S): MARPAT 123:83356

GI



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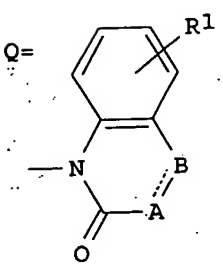
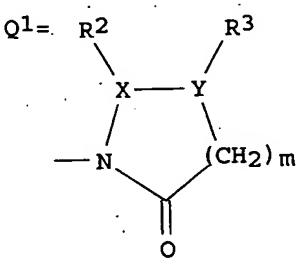
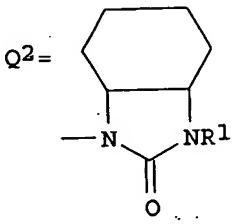
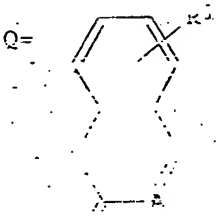






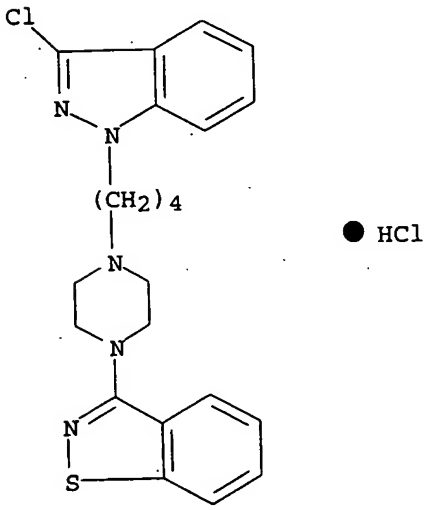


AB Compds. represented by general formula [I; n = 2-4; W = heterocyclyl, e.g., Q - Q2; m = 0-2; A = CH2, CH, N, NH; B = CH2, CH, N, NH, S; provided that both A and B .noteq. N or NH; X = CH, N, S, bond; Y = CH, N; R1 = H, halo, lower (halo)alkyl, (un)substituted Ph, OH, NO2, lower alkoxy, NH2, cyano; R2, R3 = H, halo, lower (halo)alkyl or alkoxy, NH2, cyano, provided that when X = bond, R2 is not present; or R2R3 = (CH2)p (wherein p = 3-5)] and pharmacol. acceptable salts thereof, reduced in the adverse effect against the extrapyramidal system and hence useful as an antipsychotic agent with few side effects, are prepd. Thus, 0.29 g 2-hydroxyquinoline was dissolved in DMF and treated with 80 mg NaH at 60.degree. for 30 min with stirring followed by cooling the reaction mixt. to room temp. and adding 2.16 g 1,4-dibromobutane and the resulting mixt. was stirred at 60.degree. for 4 h to give 64% 1-(4-bromobutyl)-2(1H)-quinolinone (II). II 0.56, 3-(1-piperazinyl)-1,2-benzisothiazole 0.44, and K2CO3 0.33 g were suspended in DMF and stirred at room temp. for 12 h to give 80% title

compd. I (n = 4, W = 2-oxo-1,2-dihydro-1-quinolinyl). II (n = 4, W = 9-carbazolyl) and II (n = 3, W = 2-oxo-1,2-dihydro-1-quinolinyl) showed ED50 of 1.15 and 0.92 mg/kg i.p., resp., for inhibiting methamphetamine-induced spontaneous movement of mice (vs. 0.16 and 1.05 mg/kg i.p. for haloperidol and chlorpromazine, resp.) and induced catalepsy in mice at ED50 of >100 and 83.3 mg/kg i.p. in mice (vs. 1.3 and 6.2 mg/kg i.p. for haloperidol and chlorpromazine, resp.).

IT **165109-38-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of [N-(heterocyclylalkyl)piperazinyl]benzisothiazole derivs. as antipsychotics)

RN 165109-38-6 CAPLUS
CN 1,2-Benzisothiazole, 3-[4-[4-(3-chloro-1H-indazol-1-yl)butyl]-1-piperazinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,122	08/10/2001	J. Guy Breitenbucher	ORT-1478	6262

27777 7590 10/23/2002

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EXAMINER
BERNHARDT, EMILY B

ART UNIT	PAPER NUMBER
1624	6

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Returned

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OCT 28 2002
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11/23/02

ce Action Summary	Application No. 09/928,122	Applicant(s) BREITENBUCHER et al.
	Examiner Emily Bernhardt	Art Unit 1624

The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Reply

ORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM MAILING DATE OF THIS COMMUNICATION.

- tensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the ailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-50 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claims 1-50 are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-50 drawn to compounds,compositions and uses where n=1 and R5/R6 forms pyridine or carbocyclic ring and XYZ ring is monocyclic or further fused at W/R1, classified in class 544,subclasses such as 295,362 and others as determined by the nature of substitiuents permitted thereon, and class 514 subclasses 252.18,253.04,etc.

II. Claims 1-8,11-26,29-31,35,38,42-50, drawn to compounds,compositions and uses where n=1 and R5/R6 does not further fuse and XYZ is as defined in group I, classified in class 544 , subclasses such as 371,etc; class 514 subclass 254.05.

III. Claim 38, drawn to bipyrazinyl species (see for example 1st species in claim 38 and 4th one on p.147), classified in class 544, subclass 357.

IV. Claims 1-32,42-50, drawn to compounds,compositions and uses where n=1 not provided for by I-II above, classified in classes,

subclasses as determined by the exact nature of fused rings permitted on either end of azine ring and substituents thereon.

V. Claims 1-32 and 42-50, drawn to compounds,compositions ~~ad~~ and uses where n=2, classified in class 540, subclass 575;class 514 subclass 218.

In addition to an election of one of the above groups,applicants are required to elect a single species embracive of said group. If IV or V is elected further restriction as was done for groups I-II at XYZ and R5/R6 would be required.

The inventions are distinct, each from the other because of the following reasons: They embrace compounds having different cores and/or with varying substitution permitted at both ends of the azine rings which are differently classified,require separate literature searches and would be expected to raise different issues of patentability- at the very least which is evidenced by art cited in applicants' international search report.Thus each of the groups can support a patent and the compounds are capable of additional uses other than that embraced herein.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication should be directed to Emily Bernhardt at telephone number (703) 308-4714.

A facsimile center has been established for Group 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machine are (703) 308-4556 or (703) 305-3592.

E Bernhardt

EMILY BERNHARDT

PRIMARY EXAMINER

GROUP 1600